REMARKS

The enclosed is responsive to Examiner's Office Action mailed on July 30, 2007. At the time Examiner mailed the Office Action claims 1-20 were pending. By way of the present response Applicant has: 1) amended claims 1, 4, 7, 10, 12 and 15; 2) added no new claims; and 3) canceled claims 3 and 9. As such, claims 1-20 remain pending. Applicants respectfully request reconsideration of the present application and the allowance of all claims now presented. Applicant submits that new matter has been added.

I.   Claim Rejections – 35 USC §103

Claims 1-6 are rejected under 35 U.S.C. 103(a), as being unpatentable over Hattrup et al., US 2004/0243643 (hereinafter "Hattrup") in view of the knowledge of one skilled in the art and claims 7-20 are rejected under 35 U.S.C. 103(a) in view of Muthiatacharoen (Athicha Muthiatacharoen, Benjie Chen, and David Mazieres "A Low-bandwidth Network File System," MIT Laboratory for Computer Science and NYU Department of Computer Science) (hereinafter "Muthiatacharoen"). Applicant does not admit that Hattrup is prior art by filing this response and reserves the right to swear behind the reference at a later date.

a. Independent claims 1, 7, 12 and 15

Each of independent claims 1, 7, 12 and 15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hattrup. Applicant has amended

claims 1, 7, 12 and 15 and submits that Hattrup at least fails to disclose the following bolded limitations contained in exemplary claim 1:

> 1.   A computer implemented method for storing data comprising:
> **receiving a composite data stream from a backup server, the composite data stream comprising a plurality of constituent data streams, wherein a first of the plurality of constituent data streams is user data and a second of the plurality of constituent data streams is administrative data**;
> storing the received composite data stream so that it may be restored, said storing including,
> **decomposing the composite data stream into a plurality of constituent data streams, the decomposing including at least stripping off the administrative data constituent data stream from the composite data stream prior to storing**;
> segmenting at least one of the plurality of constituent data streams decomposed from the composite data stream;
> comparing the segments resulting from the segmenting to determine those segments already stored as a result of storing a previous one of said plurality of composite data streams; and
> discarding those of the segments which are determined to have been stored previously.

Claims 7, 12 and 15 have been similarly amended. Applicant submits that the claims are patentable over Hattrup for at least the following independent reasons.

First, Hattrup discloses a backup server and Applicant is not claiming a backup server. Applicant submits that a backup server, such as the Hattrup backup server, is discussed in the background section of Applicant's specification and was well-known in the art at the time of Applicant's invention. See specification, Fig. 1; paragraphs [0003-0004]. Referring to Figure 1 in Applicant's specification, Hattrup discloses a backup server that takes data and associated metadata data streams (e.g., Constituent User Data Stream 103 and Constituent Administrative Data Stream 104 disclosed in Figure 1) and combines

them into a composite data stream, such as Composite Data Stream 101. Hattrup then transmits the composite data stream to a destination device for storage (storage device or storage server). That is, Hattrup discloses a backup server which inserts metadata into a user data stream to form a composite data stream, and then transmits the composite data stream to a destination device for storage. See e.g., Hattrup, Fig. 4; paragraph [0019] ("the system and method should backup and restore data, including embedded metadata, without altering the original data"). Applicant submits, however, that Hattrup is not directed to a novel storage server or device, such as an exemplary storage server that complies with claims 1, 7, 12 and 15 which decompose, segment, and store a composite data stream received from a backup server.

Hattrup is directed to a backup server which *transmits* composite data streams to a storage device or server. Hattrup is not directed to the storage device or server which *receives* composite data streams. Nor is Hattrup directed to a novel method of decomposing and segmenting received composite data streams. As such, Hattrup is a composite data stream *creator*, not a receiver of the composite data streams already created. That is, Hattrup creates composite data streams by combining the constituent user data stream with the constituent administrative data stream. As a result, Applicant submits that backup servers that combine user data streams with their associated administrative data streams, such as the Hattrup backup server, do not *receive* composite data streams as required by the claims. Such servers were well-known and expected in the art at the time of Applicant's invention and this is not what Applicant is claiming.

Additionally, Applicant has amended claim 1 to include the limitation,

"*receiving* a composite data stream from a backup server, the composite data stream comprising a plurality of constituent data streams," to further distinguish Hattrup and to clarify that Applicant is claiming operations performed by the *receiver* of the composited data stream and not the transmitter of the composite data stream.

Second, Applicant submits that claim 1 is patentable over Hattrup since Hattrup fails to disclose the limitation,

> *decomposing the received composite data stream into a plurality of constituent data streams, the plurality of constituent data streams including at least a first constituent data stream of user data and a second constituent data stream of administrative data,*

as required by claim 1 (as amended). The Office Action argues, "[t]he loader 210 loads autonomous operation instructions corresponding to the data of the data source 202 into a first location 212 and autonomous operation instructions corresponding to the metadata of the metadata source 204 into a second location 214." Office Action, p. 3. However, a "composite data stream," as is known and understood by persons of skill in the art, is *single* data stream transmitted from a *single* source. Further, the term "composite data stream" is defined in the specification as follows:

> The constituent user data stream 103 is combined (e.g., multiplexed) with a constituent administrative data stream 104 *to form a composite data stream 101* (e.g., a first snapshot) for backup storage. In other words, the constituent user data stream 103 is broken into data stream blocks that are interleaved with data stream blocks of the constituent administrative data stream 104 (e.g., tape markers, time stamps, hashes, error correction data, etc.).

Specification, paragraph [0003] (emphasis added), and also as follows:

The constituent user data stream 105 is combined with a
constituent administrative data stream 106 to form a composite
data stream 109 (e.g., a second snapshot) for backup storage.

Specification, paragraph [0004]. Therefore, the composite data stream is a

single data stream composed of the constituent user data stream 103 (e.g.,

autonomous operation instructions corresponding to the data of the data source

202) and the constituent administrative data stream 104 (e.g., autonomous

operation instructions corresponding to the metadata of the metadata source

204). A composite data stream is produced by combining together a number of

constituent data streams into one composite data stream so that the composite

data stream can be transmitted from a backup server to a storage device or

server for storage. Hattrup takes the constituent data streams, such as those

from data source 202 and metadata source 204, and combines them into the

composite data stream for transmission to a storage server for storage. See

e.g., Fig. 5 (illustrating the data from data source 202 being merged with the

metadata from metadata sources 204a and 204b). It is clear from the language

of the Hattrup reference that the loader receives two different data streams from

two different sources: data from data source 202 and metadata from metadata

source 204. This is further supported by reference to figure 2 which shows

server 102 receiving inputs from two different sources: data source 202 and

metadata source 204. The Office Action argues, "[t]he data and the metadata of

the stream are stored in two locations. Therefore, in order for the metadata and

the data of the stream to be stored in two separate locations, it must first be

separated [decomposed] into metadata and data streams [constituent data]. Id.

at p. 17. However, the reason the data, in this case, is stored in two separate

locations is because the data and metadata have not yet been combined into the

composite data stream for transmission, as discussed above. See also Hattrup, Fig. 2 (server 102 receives data from two sources: data source 202 and metadata source 204). The Hattrup reference inserts the metadata into the user data stream to form the composite data stream before it is transmitted to the storage destination (storage server). See e.g., Hattrup, paragraph [0028] ("[t]he present invention in certain embodiments inserts metadata within a data stream transferred using an autonomous data transfer ..."). See also Id. at paragraph [0093] ("the formatting rules 408 indicate that a header instruction 402 (H1) is to be inserted, followed by three data block instructions 406 (D1, D2, D3) that are separated by marker instructions 404 (M1 and M2)"). As discussed above, Hattrup discloses a backup server not a storage server and the data and metadata are two different streams from two different sources.

As a result of the foregoing remarks, Applicant submits that Hattrup fails to disclose the above limitation as required by the claims. Accordingly, Applicant respectfully requests withdrawal of the claim rejection as well as the rejections of the associated dependent claims.

Finally, the Office Action indicates that Hattrup describes "*segmenting at least one of the plurality of constituent data streams decomposed from the composite data stream.*" Office Action, p. 3. However, as discussed above, Hattrup does not decompose the composite data stream prior to storage. As a result, Hattrup cannot segment the decomposed data stream because Hattrup never decomposed the composite data stream in the first place (i.e. stripping off the metadata before storage). Accordingly, Applicant respectfully requests withdrawal of the claim rejections.

Accordingly, for this additional reason, Applicant respectfully requests

withdrawal of the claim rejections as well as the associated dependent claims.

CONCLUSION

Applicant respectfully submits that all rejections have been overcome by the remarks and that all pending claims are in condition for allowance. Accordingly, Applicant respectfully requests withdrawal of the claim rejections.

Invitation for a telephone interview

If a telephone conference would facilitate the prosecution of this application, Examiner is invited to contact Matthew W. Hindman at (408) 720-8300. If there are any additional charges, please charge them to our Deposit Account Number 02-2666. If there are any additional charges, please charge Deposit Account No. 02-2666 for any fee deficiency that may be due.

Respectfully Submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: 10-8-07

Matthew W. Hindman
Attorney at Law
Reg. No.: 57,396

1279 Oakmead Pkwy
Sunnyvale, CA 94085-4040
(408) 720-8300